

# ATTACHMENT 4

## Work Summary

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## **4.1 BVWSD Brackish Groundwater Recovery Project**

### **Category (a) - Direct Project Administration**

**Task 1-Administration:** Tasks include meetings with DWR and project proponents, implementing the contracts and agreements, administration of the overall grant, administration of project, coordination and correspondence with project proponents and consultants, and preparation of quarterly invoices.

**Task 2-Labor Compliance Program:** Work consists of labor compliance program development and implementation for pertinent contracts. A labor compliance consultant will be utilized to conduct reviews of contractor practices, conduct interviews, and prepare reports in accordance with the California Labor Code.

**Task 3-Reporting:** Tasks include preparation of Quarterly Progress Reports, and Final Project Report in accordance with DWR requirements. Reports will provide updates on the Project Performance Monitoring Plan (including preparation in response to a conditional award). A draft of the Final Project Report will be provided to DWR for review prior to finalizing.

*Deliverables: Task 1 - meeting minutes, sub-grant agreement between proponents and applicant, invoices; Task 2 - submission of Labor Compliance Program and reports by consultant; Task 3 - submission of Quarterly Progress Reports and Final Report*

*Category Status: 0% - Work has not begun on the above tasks.*

### **Category (b) - Land Purchase / Easement**

**Task 4-Easement Procurement:** BVWSD is currently in the process of identifying and obtaining easements adjacent to the Main Drain canal right-of-way for the winter/spring installation of the Northern Area Pipeline system. The easement for the shallow groundwater collector pipeline will be included in this easement procurement. As these projects improve the property owners land, no disputes are anticipated.

*Deliverables: Easement documents*

*Category Status: 25% - District staff is surveying easement locations and coordinating with landowners.*

### **Category (c) - Planning / Design / Engineering / Environmental Documentation**

**Task 5-Assessment and Evaluation:** BVWSD retained an engineer to perform a feasibility evaluation of the project including reviewing hydrogeology of shallow groundwater and existing pilot projects, designing proposed shallow groundwater wells, sizing and locating the collector pipeline, analyzing water blending operations, assessing water quality for crop/wetland use, analyzing electrical service/controls for wells, preparing initial project cost estimates and schedule.

*Deliverables: Technical information and exhibits incorporated into grant proposal.*

*Task Status: 100% - Engineer has completed the feasibility evaluation of the project.*

### **Task 6-Final Design:**

**Subtask 6.1 – Survey and Utility Investigation:** BVWSD is in the process of conducting topographic and boundary surveys along the Main Drain canal including the area around the proposed collector pipeline and wells. Existing utilities will be identified and incorporated into plan and profile drawings.

**Subtask 6.2 – Well Design:** A preliminary well design has been prepared as discussed in Attachment 4. The details of this design will be finalized by a registered engineer.

**Subtask 6.3 – Electrical Design & PG&E Coordination:** An electrical engineer will design the electrical services for the wells. The preliminary design has accounted for 6 electrical services with PG&E that will distribute power to approximately 7 wells each. The design will finalize these details along with the controls of the wells, power distribution. Electrical plans and specifications will be prepared for the project. Work includes coordination with PG&E for services.

**Subtask 6.4 – Project Design:** A basis of design (BOD) memorandum will be prepared for the project that documents the assumptions, design criteria, proposed design layouts. After approval of the BOD, plans, specifications, and an estimate (PS&E) will be prepared for the collector pipeline, well pump, valving and backflow prevention, I-5/canal crossings, and interconnections with the North Area Pipeline. The PS&E will be prepared at 50%, 90%, and 100% design levels for review by District staff. Quality Assurance/Quality Control (QA/QC)

reviews will be conducted at each interval by a Principal level engineer. At completion of this subtask, the PS&E incorporated into contract documents for bid by Contractors.

*Deliverables: BOD memorandum and blending requirements confirmation, 50%, 90%, and 100% PS&E (including electrical drawings and specifications), contract documents*

*Task Status: 5% - District is performing the design survey and utility investigation.*

**Task 7-Environmental Documentation:** An Environmental Impact Report (EIR) for the BVWSD Water Management Program (State Clearinghouse No. 2009011008) was prepared in 2009 for this project (in addition to 3 other proposed projects). The EIR was prepared and adopted in accordance with CEQA law.

*Deliverables: Adopted EIR and all notices (to be submitted 30 day conditional period)*

*Task Status: 100% - CEQA Complete*

**Task 8-Permitting:**

**Subtask 8.1 – SWPPP:** A Stormwater Pollution Prevention Plan (SWPPP) will be prepared in accordance with the SWRCB requirements and uploaded to their website.

**Subtask 8.2 – DCP and ISR:** A Dust Control Plan (DCP) and Indirect Source Review (ISR) will be prepared in accordance with the San Joaquin Valley Air Pollution Control Board (SJVAPCD) requirements.

**Subtask 8.3 – Well Permits:** Well permits will be obtained from Kern County for the project.

**Subtask 8.4 – Semitropic WSD Encroachment Permit:** Coordination with Semitropic and obtaining permit for pipeline crossing of Semitropic's canal.

(Note: An encroachment permit is not required for the I-5 crossing as BVWSD has a joint use agreement with Caltrans for their existing box culvert crossing. Coordination with Caltrans and subject work shall be performed in accordance with this agreement.)

*Deliverables: SWPPP, DCP, ISR, Well permits, Semitropic WSD permit*

*Task Status: 0% - Work has not begun.*

**Category (d) - Construction / Implementation**

**Task 9-Construction Contracting:** Two contracts are anticipated for construction, one for the well drilling and equipping and the second for the pipeline construction. Tasks for each contract include: issue contract documents for a 42 day notice period for soliciting bids, conduct pre-bid meeting, issue addendums as necessary, hold bid opening, review bids, and award contract.

**Task 10-Construction:**

**Subtask 10.1: Mobilization and Site Preparation:** Pipeline alignment and well locations will be staked by surveyor for construction. Contractors will locate existing utilities (USA) and mobilize equipment.

**Subtask 10.2: Construction:** Collector pipeline will be installed in accordance with the American Society of Agricultural and Biological Engineers (ASABE) standards. Shallow wells will be constructed in accordance with DWR's Well Standards, as applicable, and Kern County requirements under the well permit.

**Subtask 10.3: Performance Testing & Demobilization:** Development of wells and selection of well pump will be in accordance with the BOD memorandum. Pipeline will be pressure tested in accordance with AWWA C600. Water quality and flow testing will be performed to determine blending requirements for crops/wetlands. An O&M manual will be prepared and training will be conducted for the operators to ensure blending requirements are met.

**Task 11-Environmental Compliance/Mitigation/Enhancement:** Prepare field reviews and compliance documentation in accordance with the SWPPP, DCP, well permits, and EIR mitigation measures.

**Task 12-Construction Administration:** Work consists of contract administration, processing contractor requests for payment, material submittal reviews, holding a pre-construction meeting, review of facility construction, hydrogeologist review of well construction, soil compaction and materials testing, responding to requests for information (RFIs), issuing change orders as needed, preparation of project as-builts, and project closeout.

*Deliverables: Task 9-Contract documents, addendums, pre-bid meeting minutes, construction contracts; Task 10-O&AM Manual, training meeting notes; Task 11-field review reports and compliance documentation; Task 12- preconstruction and progress meeting minutes, change orders, pay requests, record drawings, certificate of project completion*

*Category Status: 0% - Work has not begun.*

## **4.2 ID4 CVC Extension Lining Project (Phase 1-Pool No. 7)**

### **Category (a) - Direct Project Administration**

**Task 1-Administration:** Tasks include meetings with DWR and project proponents, implementing the contracts and agreements, administration of the overall grant, administration of project, coordination and correspondence with project proponents and consultants, and preparation of quarterly invoices.

**Task 2-Labor Compliance Program:** Work consists of labor compliance program development and implementation for pertinent contracts. A labor compliance consultant will be utilized to conduct reviews of contractor practices, conduct interviews, and prepare reports in accordance with the California Labor Code.

**Task 3-Reporting:** Tasks include preparation of Quarterly Progress Reports, and Final Project Report in accordance with DWR requirements. Reports will provide updates on the Project Performance Monitoring Plan (including preparation in response to a conditional award). A draft of the Final Project Report will be provided to DWR for review prior to finalizing.

*Deliverables: Task 1 - meeting minutes, subgrant agreement between proponents and applicant, invoices; Task 2 - submission of Labor Compliance Program and reports by consultant; Task 3 - submission of Quarterly Progress Reports and Final Report*

*Category Status: 0% - Work has not begun on the above tasks.*

### **Category (b) - Land Purchase / Easement**

**Task 4- Easement Procurement:** KCWA is currently in the process of identifying and obtaining temporary construction easements adjacent to the CVC Pool No. 7 right-of-way for the installation of the canal lining.

*Deliverables: Easement documents*

*Category Status: 5% - District is obtaining easement information and coordinating with landowners.*

### **Category (c) - Planning / Design / Engineering / Environmental Documentation**

**Task 5- Assessment and Evaluation:** Review the operational characteristics of the CVC (including pipelines used for siphons), the existing CVC Pumping Plant No. 7, canal turnouts/points of delivery and associated facilities in CVC Pool No. 7. Perform a hydraulic analysis to optimize the new channel cross-section to convey design flow, and to quantify the dynamic hydraulic impacts at CVC Pumping Plant No. 7 and other facilities within CVC Pool No. 7 with the new canal cross-section in place. Prepare preliminary construction plans, initial project cost estimates and schedule.

*Deliverables: 15% Construction Plans, Technical analysis and exhibits incorporated into grant proposal.*

*Task Status: 75% - Engineer has completed the feasibility evaluation of the project.*

### **Task 6-Final Design:**

*Subtask 6.1 – Survey and Utility Investigation:* KCWA will conduct topographic and boundary surveys along the CVC Pool No. 7 canal. Existing utilities will be identified and incorporated into plan and profile drawings.

*Subtask 6.2 – Geotechnical Investigation:* A licensed geotechnical firm will perform a comprehensive geotechnical review of the canal alignment including reaches adjacent to existing siphon structures and turnouts for the design of the Project.

*Subtask 6.3 – Project Design:* A basis of design (BOD) memorandum will be prepared for the project that documents the assumptions, design criteria, proposed design layouts. After approval of the BOD, the PS&E will be prepared for the canal lining. The PS&E will be prepared at 50%, 90%, and 100% design levels for review by KCWA staff. QA/QC reviews will be conducted at each interval by a Principal level engineer. At completion of this subtask, the PS&E incorporated into contract documents for bid by Contractors.

*Deliverables: BOD memorandum, 50%, 90%, and 100% PS&E, contract documents*

*Task Status: 5% - Design survey and utility investigation not fully started yet.*

**Task 7- Environmental Documentation:** Preparation of CEQA compliance documents. KCWA anticipates that a mitigated negative declaration will be necessary. Tribal notification will be included in the CEQA process.

*Deliverables: Adopted CEQA document and all notices*

*Task Status: 0% - CEQA process has not been started.*

**Task 8-Permitting:**

*Subtask 8.1 – SWPPP:* A SWPPP will be prepared in accordance with the SWRCB requirements and uploaded to their website.

*Subtask 8.2 – DCP and ISR:* A DCP and ISR will be prepared in accordance with the SJVAPCD requirements.

*Deliverables: SWPPP, DCP, ISR*

*Task Status: 0% - Work has not begun.*

**Category (d) - Construction / Implementation**

**Task 9- Construction Contracting:** Issue contract documents for a 30 day public noticed bid. Assist during bidding process including job walk, bid opening and bid review. Prepare addendums, if necessary, prior to contract bid date. Select lowest responsible qualified responsive bidder. Award contract.

*Deliverables: Advertisement for bids; pre-bid contractors meeting; evaluation of bids; award contract.*

*Task Status: 0% - Work has not begun.*

**Task 10-Construction:**

*Subtask 10.1: Mobilization and Site Preparation:* CVC Pool No. 7 canal alignment will be staked by surveyor for construction. Contractors will locate existing utilities (USA) and mobilize equipment.

*Subtask 10.2: Construction:* Canal lining will be installed in accordance with the Plans and Specifications.

*Subtask 10.3: Performance Testing & Demobilization:* Canal lining shall be constructed in accordance with the BOD document provided to KCWA. Training will be conducted for the operators to ensure canal operation meets KCWA operational requirements.

*Deliverables: Training meeting notes*

*Task Status: 0% - Work has not begun.*

**Task 11-Environmental Compliance/Mitigation/Enhancement:** Prepare field reviews and compliance documentation in accordance with the SWPPP, DCP, and CEQA mitigation measures.

*Deliverables: Field review reports and compliance documentation*

*Task Status: 0% - Work has not begun.*

**Task 12-Construction Administration:** Work consists of contract administration, processing contractor requests for payment, material submittal reviews, holding a pre-construction meeting, construction review, soil compaction and materials testing, responding to requests for information (RFIs), issuing change orders as needed, preparation of project record drawings, and project closeout.

*Deliverables: Preconstruction and progress meeting minutes, change orders, pay requests, record drawings, certificate of project completion*

*Task Status: 0% - Work has not begun.*

### 4.3 AEWSD In-Lieu Program

The AEWSD In-Lieu Program consists of three individual projects, the Sycamore and North Canal In-Lieu Projects, and the North Canal Pump Back Project. Due to different stages of project development, tasks under Category (b) through Category (d) will be implemented separately for each specified project. Tasks under Category (a) will be implemented concurrently for all projects.

#### **Category (a) - Direct Project Administration**

**Task 1-Administration:** Tasks include meetings with DWR and project proponents, implementing the contracts and agreements, administration of the overall grant, administration of project, coordination and correspondence with project proponents and consultants, and preparation of quarterly invoices.

**Task 2-Labor Compliance Program:** Work consists of labor compliance program development and implementation for pertinent contracts. A labor compliance consultant will be utilized to conduct reviews of contractor practices, conduct interviews, and prepare reports in accordance with the California Labor Code.

**Task 3-Reporting:** Tasks include preparation of Quarterly Progress Reports, and Final Project Report in accordance with DWR requirements. Reports will provide updates on the Project Performance Monitoring Plan (including preparation in response to a conditional award). A draft of the Final Project Report will be provided to DWR for review prior to finalizing.

*Deliverables: Task 1 - meeting minutes, subgrant agreement between proponents and applicant, invoices; Task 2 - submission of Labor Compliance Program and reports by consultant; Task 3 - submission of Quarterly Progress Reports and Final Report*

*Category Status: 0% - Work has not begun on the above tasks.*

#### **Category (b) - Land Purchase / Easement**

**Task 4- Landowner Agreements:** Prepare and obtain agreements with in-lieu recharge project landowners necessary for construction, operation, and maintenance of in-lieu project facilities. Agreements with landowners will cover: supplying surface water, supplying PWRPA power for wells, and for the District's use of their wells activities.

*Deliverables: Signed landowner agreements*

*Category Status: 25% - District is surveying easement locations and coordinating with landowners within the Sycamore In-Lieu Project area.*

#### **Category (c) - Planning / Design / Engineering / Environmental Documentation**

**Task 5- Assessment and Evaluation:** Preliminary Power Planning: Perform electrical planning work (includes utility data collection and baseline analysis, and utility operational criteria and policy analysis), prepare PWRPA power purchase and PG&E agreements for power service to landowner wells in the in-lieu project areas.

*Deliverables: Contracted agreements with PWRPA and PG&E*

*Task Status: 25% - District is surveying easement locations and coordinating with landowners within the Sycamore In-Lieu Project area.*

#### **Task 6-Final Design:**

**Subtask 6.1 – Survey and Utility Investigation:** Provide boundary and topographic surveys for design of the proposed pilot in-lieu project facilities. The coordinates shall be noted on each page of the drawings at regular intervals or as special details require it to be noted. Existing utilities will be identified and incorporated into plan and profile drawings.

**Subtask 6.2 – Electrical Design:** An electrical engineering consultant will design the addition of power supply and pump controls for the North Canal Pump Back Project. Electrical plans and specifications will be prepared for that project. The other projects will not require electrical design.

**Subtask 6.3 – Project Design:** A BOD memorandum will be prepared by the District's consulting engineer for each of the three projects that documents the assumptions, design criteria, and proposed design layouts. This subtask includes coordination with landowners and AEWSD staff to confirm requirements of well and pump usage. After approval of the BOD, the PS&E will be prepared for the required canal structures, pipelines, delivery facilities,

electric and flow metering, and pumps for the in-lieu projects and design and bidding of the required reverse –flow pump facilities for North Canal Pump Back Project. The PS&E will be prepared at 50%, 90%, and 100% design levels for review by District staff. QA/QC reviews will be conducted at each interval by a Principal level engineer. At completion of this subtask, the PS&E incorporated into contract documents for bid by Contractors.

*Deliverables: BOD memorandum and well operation documentation, 50%, 90%, and 100% PS&E (including electrical drawings and specifications), contract documents*

*Task Status: 5% - District is performing the design survey and utility investigation within the Sycamore In-Lieu Project area.*

**Task 7-Environmental Documentation:** Preparation of required environmental compliance documents including biological site surveys, cultural resources surveys and CEQA compliance documents. Tribal notification will be included in the CEQA process.

*Deliverables: Adopted CEQA document and all notices*

*Task Status: 5% - Work has been started on the Sycamore In-lieu Project environmental documentation.*

**Task 8-Permitting:**

**Subtask 8.1 – SWPPP:** A SWPPP will be prepared in accordance with the SWRCB requirements and uploaded to their website.

**Subtask 8.2 – DCP and ISR:** A DCP and ISR will be prepared in accordance with the SJVAPCD requirements.

**Subtask 8.3 - Encroachment permits** from County of Kern for pipe crossings of County roads will be obtained.

*Deliverables: SWPPP, DCP, ISR, County Road Encroachment Permits*

*Task Status: 0% - Work has not begun.*

**Category (d) - Construction / Implementation**

**Task 9-Construction Contracting:** Four contracts are anticipated for construction, one for the power meter installation, one for each of the Sycamore and North Canal In-Lieu Project facilities, and the fourth for the North Canal Pump Station improvements. Tasks for each contract include: issue contract documents for a 45 day notice period for soliciting bids, conduct pre-bid meeting, issue addendums as necessary, hold bid opening, review bids, and award contract.

**Task 10-Construction:**

**Subtask 10.1: Mobilization and Site Preparation:** Pipeline alignment and well locations will be staked by surveyor for construction. Contractors will locate existing utilities (USA) and mobilize equipment.

**Subtask 10.2: Construction:** Required pipelines will be installed in accordance with the ASABE standards. Meters shall be installed according to PRWPA contracts. And, North Canal Pump Station construction shall be performed in accordance with American National Standards Institute/Hydraulic Institute (ANSI/HI) standards.

**Subtask 10.3: Performance Testing & Demobilization:** Construction of the in-lieu facilities and North Canal Pump Station will be in accordance with the BOD memorandum. Pipeline will be pressure tested in accordance with AWWA C600. An O&M manual will be prepared and training will be conducted for the operators.

**Task 11-Environmental Compliance/Mitigation/Enhancement:** Prepare field reviews and compliance documentation in accordance with the SWPPP, DCP, and any required environmental mitigation measures.

**Task 12-Construction Administration:** Work consists of contract administration, processing contractor requests for payment, material submittal reviews, holding a pre-construction meeting, review of facility construction, soil compaction and materials testing, responding to RFIs, issuing change orders as needed, preparation of project record drawings, and project closeout.

*Deliverables: Task 9-Contract documents, addendums, pre-bid meeting minutes, construction contracts; Task 10-O&AM Manual, training meeting notes; Task 11-field review reports and compliance documentation; Task 12- preconstruction and progress meeting minutes, change orders, pay requests, record drawings, certificate of project completion*

*Category Status: 0% - Work has not begun.*



## **4.4 BCWD Water Main Replacement and Meter Installation Project**

### **Category (a) - Direct Project Administration**

**Task 1-Administration:** Tasks include meetings with DWR and project proponents, implementing the contracts and agreements, administration of the overall grant, administration of project, coordination and correspondence with project proponents and consultants, and preparation of quarterly invoices.

**Task 2-Labor Compliance Program:** Work consists of labor compliance program development and implementation for pertinent contracts. A labor compliance consultant will be utilized to conduct reviews of contractor practices, conduct interviews, and prepare reports in accordance with the California Labor Code.

**Task 3-Reporting:** Tasks include preparation of Quarterly Progress Reports, and Final Project Report in accordance with DWR requirements. Reports will provide updates on the Project Performance Monitoring Plan (including preparation in response to a conditional award). A draft of the Final Project Report will be provided to DWR for review prior to finalizing.

*Deliverables: Task 1 - meeting minutes, sub-grant agreement between proponents and applicant, invoices; Task 2 - submission of Labor Compliance Program and reports by consultant; Task 3 - submission of Quarterly Progress Reports and Final Report*

*Category Status: 0% - Work has not begun on the above tasks.*

### **Category (b) - Land Purchase / Easement**

**Task 4- Land Acquisition:** No easements or land need to be acquired as the replacement water mains will be located within existing public right-of-ways.

*Deliverables: N/A*

### **Category (c) - Planning / Design / Engineering / Environmental Documentation**

#### **Task 5- Assessment and Evaluation:**

**Subtask 5.1 – Feasibility Study:** Prepare conceptual design of project including pipeline sizing, fire flow analysis, fire hydrant location plan (to be reviewed and approved by the Kern County Fire Department), and review of water main placement in right-of-way. Prepare BOD memorandum with design assumptions, standards for construction, and workplan. Prepare initial project cost estimates and schedule.

**Subtask 5.2 – Rate Study, Outreach, Prop. 218 Proceedings:** Prepare rate study based on a metered system. Utilize AWWA M54 for developing rates for a small water system that are equitable and fair. Conduct public outreach meetings to discuss project and upcoming rate changes. Utilize available data from meters as they are installed to confirm proposed rates will obtain required revenues. Conduct Prop. 218 majority protest proceedings to implement new rate structure. Implement new rate structure and input customer data into database for future billings.

*Deliverables: BOD memorandum and exhibits. Rate Study, Outreach meeting materials, Prop. 218 meeting minutes.*

*Task Status: 25% - Engineer has completed initial cost estimates and initial conceptual design details.*

#### **Task 6-Final Design:**

**Subtask 6.1 – Survey and Utility Investigation:** Conduct a topographic and boundary survey of the project area. A basemap will be created using data from the survey and existing utilities (identified in the field and through utility company records) will be incorporated.

**Subtask 6.2 – Geotechnical Investigation:** A licensed geotechnical firm will perform a limited geotechnical review of the soils in the project area to provide design recommendations for pipeline bedding and backfill.

**Subtask 6.3 – Project Design:** After approval of the BOD, the PS&E will be prepared for the water main and meters installation. The PS&E will be prepared at 50%, 90%, and 100% design levels for review by BCWD staff. QA/QC reviews will be conducted at each interval by a Principal level engineer. At completion of this subtask, the PS&E incorporated into contract documents for bid by Contractors. A courtesy plan set will be provided to CDPH for their review; however no permit amendment is required for pipeline replacement.

*Deliverables: 50%, 90%, and 100% PS&E, contract documents*

*Task Status: 0% - Final Design has not been started.*



**Task 7- Environmental Documentation:** With the project consisting of the replacement of existing water supply facilities with substantially the same purpose and capacity a Class 2 Categorical Exemption applies for the project and a Notice of Exemption will be prepared and filed with Kern County.

*Deliverables: Notice of Exemption*

*Task Status: 0% - CEQA process has not been started.*

**Task 8-Permitting:**

*Subtask 8.1 – SWPPP:* Based on the size of the project, the preparation of a SWPPP is necessary and will be prepared in accordance with the SWRCB requirements and uploaded to their website.

*Subtask 8.2 – DCP and ISR:* A DCP and ISR will be prepared in accordance with the SJVAPCD requirements.

*Subtask 8.3 – Encroachment Permits:* An encroachment permit application will be prepared for the Highway 58 pipeline crossing and submitted to Caltrans for their review and approval. Encroachment permits from the County of Kern will be obtained for work within County road right-of-ways.

*Deliverables: SWPPP, DCP, ISR, Caltrans and County Encroachment Permits*

*Task Status: 0% - Work has not begun.*

**Category (d) - Construction / Implementation**

**Task 9- Construction Contracting:** Issue contract documents for a 30 day public noticed bid. Assist during bidding process including job walk, bid opening and bid review. Prepare addendums, if necessary, prior to contract bid date. Select lowest responsible qualified responsive bidder. Award contract.

*Deliverables: Advertisement for bids; pre-bid contractors meeting; evaluation of bids; award contract.*

*Task Status: 0% - Work has not begun.*

**Task 10-Construction:**

*Subtask 10.1: Mobilization and Site Preparation:* A pre-construction meeting will be held to review the project design and contract requirements. The water main alignments and appurtenances will be staked by a surveyor for construction. Contractors will locate existing utilities (USA) and mobilize equipment.

*Subtask 10.2: Construction:* The Contractor will construct the facilities accordance with the plans and specifications. Pipeline installation details shall be in accordance with County of Kern and AWWA standards.

*Subtask 10.3: Performance Testing & Demobilization:* The water mains will be pressure tested and disinfected in accordance with AWWA standards. After the new facilities pass these tests, the new system will go online and the old system will be abandoned.

*Deliverables: Training meeting notes*

*Task Status: 0% - Work has not begun.*

**Task 11-Environmental Compliance/Mitigation/Enhancement:** Prepare field reviews and compliance documentation in accordance with the SWPPP and DCP.

*Deliverables: Field review reports and compliance documentation*

*Task Status: 0% - Work has not begun.*

**Task 12-Construction Administration:** Work consists of contract administration, processing contractor requests for payment, material submittal reviews, holding a pre-construction meeting, review of facility construction, soil compaction and materials testing, responding to RFIs, issuing change orders as needed, preparation of project record drawings, and project closeout.

*Deliverables: Preconstruction and progress meeting minutes, change orders, pay requests, record drawings, certificate of project completion*

*Task Status: 0% - Work has not begun.*